








ZnO COMPOUND SEMICONDUCTOR LIGHT EMITTING ELEMENT AND PRODUCTION METHOD THEREOF

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Abstract of WO0108229

A silicon nitride film (2) is provided on a silicon substrate (1), and on the film (2) is laminated a semiconductor laminate (11) having at least n-type layers (3), (4) and p-type layers (6), (7) consisting of ZnO compound semiconductors so as to form a luminous layer. This silicon nitride film (2) is preferably formed by heat-treatment in an atmosphere containing nitrogen such as ammonia gas. In another embodiment, a luminous element or the like is formed by growing a ZnO compound semiconductor layer with a plane orthogonal to the C plane of a sapphire substrate used as a main plane, thereby providing a high-characteristic element using a ZnO compound such as an LED excellent in crystallinity and high in luminous efficiency.

